



Department of Defense **DIRECTIVE**

June 24, 1987
NUMBER 4650.1

ASD(C3I)

SUBJECT: **Management** and Use of the Radio Frequency spectrum

- References:
- (a) DoD Directive 4650.1, "**Management** and Use of the Radio Frequency Spectrum," December 13, 1974 (hereby canceled)
 - (b) U.S. Department of **Commerce, National Telecommunications** and Information Administration, "Manual of Regulations and Procedures for Federal Radio Frequency Management," May 1986
 - (c) DoD Directive 51 00.3S, "Military **Communications-Electronics** Board," May 6, 1985
 - (d) Office of Management and Budget (OMB) Circular No. A-n, "Preparation and Submission of Budget Estimates," Paragraph 13-2 (o), May 1986
 - (e) Federal Acquisition Regulation, 1984
 - (f) DoD Federal Acquisition Regulation Supplement, 1986

A. REISSUANCE AND PURPOSE

1. This Directive reissues reference (a) to:
 - a. Provide DoD policy.
 - b. Assign responsibility.
 - c. Specify procedures for DoD management and use of the radio frequency spectrum.

B. APPLICABILITY

This Directive applies to the Office of the Secretary of Defense (OSD), the Military Departments, the Organization of the Joint Chiefs of Staff (OJCS), the Unified and Specified **Commands**, the Inspector General of the **Department of Defense** (IG, DoD), the Defense Agencies, and DoD Field Activities (hereafter referred to collectively as "DoD Components"). The term "Military Services," as used herein, refers to the **Army, Navy, Air Force, and Marine Corps**.

C. DEFINITIONS

1. **Communications-Electronics**. The specialized field concerned with the use of electronic devices and systems for the acquisition or acceptance, processing, storage, display, analysis, protection, disposition, and transfer of information.
2. **Radio Frequency Spectrum**. The frequencies (or wavelengths) associated with radio wave propagation (3 kilohertz (3 X 10³ hertz) to 3,000 gigahertz (3 X 10¹² hertz) or wavelength of 100 kilometers to 0.1 millimeter, respectively).

3. **Spectrum Management.** The function where use of the radio frequency spectrum is controlled to ensure the **electromagnetic compatibility of communications-electronics systems.** Requirements for use of the radio frequency spectrum are presented, reviewed, and, to the degree possible, satisfied for **communications-electronics** systems being acquired or brought into use.

D. POLICY

1. The **usable** radio frequency spectrum is vital to the support of military operations. Sound engineering and **operative practices** shall be applied throughout the Department of Defense to use **effectively** and prudently the radio frequency spectrum. Due regard shall be given to the rights of other spectrum users.

2. The **spectrum management** function is a part of and essential to military planning, research, development, and **operations involving communications-electronics systems** using the radio frequency spectrum.

3. Within the Department of Defense, the **spectrum** management function shall be accomplished at a level thoroughly familiar with and immediately responsive to the requirements of the operating forces and sufficiently close to major policy-making offices (Service, joint, departmental, Federal, and allied) to facilitate referral of issues requiring consideration by these offices.

4. U.S. national and international policies and procedures pertaining to spectrum management and departmental and joint Service implementing directives for **effectively** using radio frequencies shall be disseminated as guidance to DoD Components.

E. RESPONSIBILITIES

1. The Under Secretary of Defense (Acquisition) (USD(A)) is responsible for establishing policy for acquiring systems that use the radio frequency spectrum and for ensuring compliance with radio frequency spectrum supportability procedures.

2. The Assistant Secretary of Defense (Command, Control, Communications and Intelligence) (ASD(C³I)) shall:

a. Provide overall policy for managing and using the radio frequency spectrum and for implementing applicable provisions of the "Manual of Regulations and Procedures for Federal Radio Frequency Management" (reference (b)) within the Department of Defense. Spectrum management shall be accomplished in consonance with such policy and in coordination with applicable DoD Components.

b. Ensure DoD frequency spectrum policy is represented interdepartmentally and internationally.

3. The Organization of the Joint Chiefs of Staff (JCS), in consonance with ASD(C³I), shall provide guidance on joint and inter-Service operational military spectrum management matters. Under the Joint Chiefs of Staff (JCS), the Chairman of the Military Communications-Electronics Board (MCEB) is responsible for managing the Frequency Resource Record System (FRRS). The FRRS

is the single consolidated DoD frequency record-keeping system. It assists DoD frequency managers and Operational users in managing the radio frequency spectrum.

4. The Military Communications-Electronics Board (MCEB), in addition to and in amplification of the functions and responsibilities assigned in DoD Directive 5100.35 (reference (c)), shall provide spectrum management support as requested by the DoD Components.

5. The Secretaries of the Military Departments shall:

a. Provide spectrum management within their respective Military Departments .

b. Implement applicable provisions of the "Manual of Regulations and Procedures for Federal Radio Frequency Management" (reference (b)), OMB Circular No. A-11 (reference (d)), the "Federal Acquisition Regulation" (reference (e)), and the "DoD Federal Acquisition Regulation Supplement" (reference (f)) with respect to spectrum management.

c. Provide members to the Interdepartment Radio Advisory Committee (IRAC) according to reference (b) and other forums as required.

6. The Director of the Defense Communications Agency (DCA) shall provide spectrum management for the Defense Communications System in consonance with this Directive.

7. The Director of the National Security Agency (NSA) shall provide spectrum management for the NSA mission in consonance with this Directive.

F. PROCEDURES

1. All DoD Components shall:

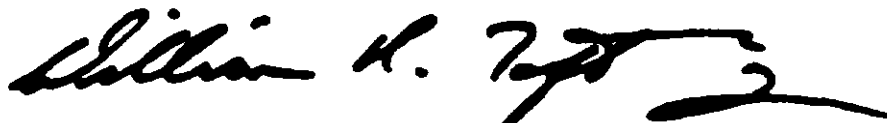
a. Obtain radio frequency spectrum guidance for communications - electronics systems from the MCEB as early as possible during the concept exploration and demonstration and validation stages of system acquisition. MCEB guidance must be obtained before issuing contractual obligations for the full-scale development, production, or procurement of those systems. Radio frequency spectrum support requirements shall be sent through the MCEB, for coordination with host nations where this equipment is intended to be deployed, as early in the acquisition as practical. Host-nation coordination must be initiated before contracting for a system's full-scale development.

b. Participate fully in the FRRS, providing required information and utilizing system outputs.

2. Additional procedures for DoD management and use of the radio frequency spectrum are published by the MCEB.

G. EFFECTIVE DATE AND IMPLEMENTATION

This Directive is *effective* immediately. Forward two copies of **implement-**
ing documents to the Assistant Secretary of Defense (Co-and, Control,
communi ca t ions **nd** Intelligence) within 90 days.



William H. Taft, IV
Deputy Secretary of Defense